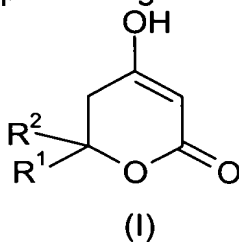


What is claimed is:

Patent Claims

1. A process for preparing a compound of general formula (I),



5 wherein

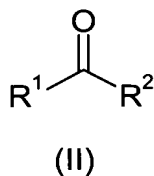
R<sup>1</sup> is a C<sub>1</sub>-C<sub>8</sub>-alkyl, C<sub>6</sub>-C<sub>10</sub>-aryl-C<sub>1</sub>-C<sub>4</sub>-alkyl or C<sub>3</sub>-C<sub>8</sub>-cycloalkyl-C<sub>1</sub>-C<sub>4</sub>-alkyl group,

and

R<sup>2</sup> is a C<sub>1</sub>-C<sub>8</sub>-alkyl group,

10 comprising:

reacting a) a ketone of formula (II)

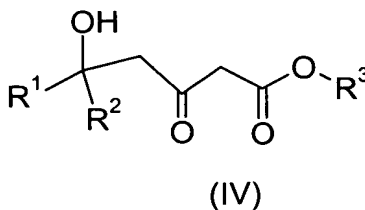


15 wherein R<sup>1</sup> and R<sup>2</sup> are as hereinbefore defined,

with an acetoacetate in the presence of a strong base

20 and

b) cyclising the resulting compound of formula (IV)



25 wherein

R<sup>3</sup> denotes a C<sub>1</sub>-C<sub>4</sub>-alkyl or benzyl group,

by means of a base, wherein a compound of formula II is continuously mixed and reacted with an acetoacetate in the form of its dianion in a microreactor, and subsequently isolating the product compound of the general formula (I).

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2. The process according to claim 1, wherein a microreactor with an interdigital channel structure is used for reaction step a).

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3. The process according to claim 2, wherein a current of educt A containing the compound of formula (II) and a current of educt B containing the acetoacetate in the form of its dianion are continuously mixed together in the mixing element of a microreactor and the liquid reaction mixture is passed into a holding capillary.

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4. The process according to claim 3, wherein the capillary is 0.1 to 10 m long and 0.05 to 5 mm in diameter.

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5. The process according to claim 4 wherein 1-phenyl-3-hexanone is used as the compound of formula (II) in step a).

6. The process according to claim 5, wherein step a) the acetoacetate is used in the presence of at least 2 equivalents of a strong base selected from sodium hydride, butyllithium and lithium dialkylamide.

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7. The process according to claim 6, wherein the acetoacetate is added to the compound of formula (II) in a molar ratio of 2:1 to 1:2.

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8. The process according to claim 7 wherein the reaction in step a) is carried out at a temperature of  $-78$  to  $+85$  °C.

9. The process according to claim 8, wherein the reaction in step a) is carried out at an overall flow rate of 1.5 to 5 ml/min.

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10. The process according to claim 9, wherein the flow rate of the compound of formula (II) to the compound of formula (III) is in a ratio of 1:1 to 1:2.

11. The process according to claim 10 wherein the reaction is carried out in a plurality of microreactors connected in series or in parallel.